



PATENT *TFW*

Attorney Docket No. P106-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Terry Tarn

Art Unit: 2826

Serial No.: 10/698,656

Examiner: Victor Mandala

Filed: 10/30/03

For: **DEVICE PACKAGES WITH LOW STRESS ASSEMBLY PROCESS**

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97(b)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The attention of the Patent and Trademark Office is hereby directed to the following documents:  
serial number 10,167,361 to Patel, et al, filed June 11, 2002;

The attention of the Patent and Trademark Office is hereby also directed to the documents  
listed on the attached PTO form 1449. Copies of the cited references are enclosed.

This Information Disclosure Statement is being submitted after issuance of a first official  
action on the merits and expiration of the three month period following filing of the above-captioned  
application, but prior to issuance of either a final official action or a Notice of Allowance.

The above information is presented so that the Patent and Trademark Office can determine  
any materiality thereof to the claimed invention. It is respectfully requested that the information be  
expressly considered during the prosecution of this application.

The Commissioner is hereby authorized to charge any additional fee (or credit any overpayment) associated with this statement to our Deposit Account No. 501516.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gregory R. Muir", written over a horizontal line.

Gregory R. Muir

Attorney for Applicant(s)

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PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

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Substitute for form 1449A/PTO		<b>Complete if Known</b>			
		Application Number	10/698,656		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Filing Date	10/30/03		
		First Named Inventor	Terry Tam		
		Art Unit	2826		
		Examiner Name	Victor Mandala		
Sheet	1	of	4	Attorney Docket Number	P106-US

U.S. PATENT DOCUMENTS					
Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	AA	US- 4,178,077	12-11-1979	TE VELDE	
	AB	US- 4,309,242	12-05-1982	TE VELDE	
	AC	US- 5,293,511	03-08-1994	PORADISH et al.	
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Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	BA	EP-1097901-A2	05-09-2001	HA et al.		
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	BJ	JP-2001196484-A	07-19-2001	JU et al.		

Examiner Signature	Date Considered
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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<b>INFORMATION DISCLOSURE CITATION</b> MAR 21 2005 PATENT & TRADEMARK OFFICE 1637 2010-1449 Sheet 2 of 6		ATTY. DOCKET NO.		SERIAL NO.			
		P106-US		10/698,656			
		APPLICANT Terry Tam					
		FILING DATE 10/30/03		GROUP 2826			
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
	6,072,236	06/06/00	Akram, et al.				
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<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
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EXAMINER	
DATE CONSIDERED	

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<b>INFORMATION DISCLOSURE CITATION</b>  <b>PTO-1449</b>  <i>Sheet 4 of 6</i>			ATTY. DOCKET NO. P106-US		SERIAL NO. 10/698,656		
			APPLICANT Terry Tarn				
			FILING DATE 10/30/03		GROUP 2826		
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
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<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
						<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	10/698,656
		Filing Date	10/30/03
		First Named Inventor	Terry Tarn
		Group Art Unit	2520
		Examiner Name	Victor Mandala
Sheet	5 of 10	Attorney Docket Number	P106-US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
	CA	ESPINOSA et al., "Identification of Residual Stress State in an RF-MEMS Device", MTS Systems Corporation white paper (May 2000).	
	CB	FRANKA et al., "Solder Bump Technology: Present and Future", Semiconductor Fabtech (May 1995).	
	CC	GLENN et al., "Packaging Microscopic Machines", Machine Design (Dec. 7, 2000).	
	CD	HARSH et al., "Flip-Chip Assembly for Si-Based MEMS", Proceedings of the 1999 IEEE International Conference on Microelectromechanical Systems (MEMS '99), Orlando, FL (Jan. 17-21, 1999), pp. 273-278.	
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	CG	LEE et al., "High-Q Tunable Capacitors and Multi-way Switches Using MEMS for Millimeter-Wave Applications", portions of slide presentation from the NSF Center for Advanced Manufacturing and Packaging of Microwave, Optical and Digital Electronics at the University of Colorado at Boulder (Sept. 1998).	
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	CI	LUXBACHER, T., "Spray Coating for MEMS, Interconnect & Advanced Packaging Applications", HDI Magazine (May 1999) (abstract only).	
	CJ	MOORE, D., "Automation Requirements for Die Bonding Process", Electronics Engineer (July 2000).	
	CK	TSAU, C., "Wafer-Level Packaging", MIT Microsystems Technology Laboratories Annual Report (May 2000), p. 49.	

Examiner Signature	Date Considered
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<b>INFORMATION DISCLOSURE CITATION</b>  <b>PTO-1449</b> <i>Sheet 6 of 6</i>		ATTY. DOCKET NO. P106-US		SERIAL NO. 10/698,656			
		APPLICANT Terry Tam					
		FILING DATE 10/30/03		GROUP 2826			
<b>U.S. PATENT DOCUMENTS</b>							
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<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
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EXAMINER				DATE CONSIDERED			

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